

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for communication between subscriber stations via a packet switching network, said process comprising
 evaluating deterministic behavior of the packet switching network, the behavior being defined as deterministic if any packet sent on the network from a source subscriber station reaches a destination subscriber station within a duration that is limited in time, said evaluating comprising:

determining a latency value, the latency value being a residence time in an output buffer of a switch,

determining a max latency value, the max latency value being a maximum residence time in an output buffer of a switch,

determining a ~~BAG_i~~ BAG_i value, the ~~BAG_i~~ BAG_i value being a minimum time between two consecutive frames belonging to a virtual link i, before they are transmitted,

determining a ~~(Jitter In)_i~~ (Jitter In)_i value, wherein the ~~(Jitter In)_i~~ (Jitter In)_i is jitter associated with a virtual link i that represents a time interval between a theoretical instant at which a frame is transmitted, and its effective transmission that may be before or after the theoretical instant,

determining a ~~(max frame duration)_i~~ (max frame duration)_i value, the ~~(max frame duration)_i~~ (max frame duration)_i value being a duration of a longest frame on the virtual link i, and

determining for each output port from each switch on the network if the following relation is satisfied:

$$\frac{\begin{array}{l} \text{i = number of virtual links} \\ \text{passing through the buffer} \end{array} \left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{\text{BAG}_i} \right) \right] * (\text{max frame duration})_i \leq \text{latency}}{\sum_{\substack{i = \text{number of virtual links} \\ \text{passing through the buffer}}} \left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{\text{BAG}_i} \right) \right] * (\text{max frame duration})_i \leq \text{latency},}$$

wherein, if the relation is not satisfied, a user is notified that said packet switching network is not deterministic.

Claim 2 (Previously Presented): A process according to claim 1, further comprising adding the virtual links one by one, and the determining of each output port is performed after each addition of a virtual link.

Claim 3 (Original): A process according to claim 1, wherein the packet switching network is located on an aircraft.

Claim 4 (Original): A process according to claim 3, wherein the packet switching network includes a first switch connected to a first graphic screen and a second graphic screen.

Claim 5 (Original): A process according to claim 4, wherein the packet switching network includes a second switch connected to a flight parameters generator and an aircraft maintenance computer.

Claim 6 (Original): A process according to claim 5, wherein the first graphic screen displays flight parameters and the second graphic screen displays flight and maintenance parameters.

Claim 7 (Currently Amended): A system for communication between subscriber stations via a packet switching network, said system ~~comprising~~ configured to evaluate ~~evaluating~~ deterministic behavior of the packet switching network, the behavior being defined as deterministic if any packet sent on the network from a source subscriber station reaches a destination subscriber station within a duration that is limited in time, the system comprising:

a latency value determining unit configured to determine a latency value;
a max latency value determining unit configured to determine a max latency value;
a BAG_i value determining unit configured to determine a BAG_i value;
a (Jitter In)_i value determining unit configured to determine a (Jitter In)_i value;
a (max frame duration)_i value determining unit configured to determine a (max frame duration)_i value; and
a control unit configured to determine for each output port from each switch on the network if the following relation is satisfied:

$$\frac{i \text{ number of virtual links passing through the buffer} \left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{\text{BAG}_i} \right) \right] * (\text{max frame duration})_i}{(\text{max frame duration})_i \leq \text{latency}}$$

$$\sum_{i = \text{number of virtual links passing through the buffer}} \left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{\text{BAG}_i} \right) \right] * (\text{max frame duration})_i \leq \text{latency},$$

in which:

the max latency value is a maximum residence time in an output buffer of a switch,

the latency value is a residence time in an output buffer of a switch,

~~BAG_i~~ BAG_i is a minimum time between two consecutive frames belonging to a virtual link i, before they are transmitted,

~~(Jitter In)_i~~ (Jitter In)_i is jitter associated with a virtual link i that represents a time interval between a theoretical instant at which a frame is transmitted, and its effective transmission that may be before or after the theoretical instant, and

~~(max frame duration)_i~~ (max frame duration)_i is a duration of a longest frame on the virtual link i; and

a user notification unit configured to notify a user that said packet switching network is not deterministic if the relation is not satisfied.

Claim 8 (Original): A system according to claim 7, in which the virtual links are added one by one, and the determining is performed after each addition of a virtual link.

Claim 9 (Original): A system according to claim 7, wherein the packet switching network is located on an aircraft.

Claim 10 (Original): A system according to claim 9, wherein the packet switching network includes a first switch connected to a first graphic screen and a second graphic screen.

Claim 11 (Original): A system according to claim 10, wherein the packet switching network includes a second switch connected to a flight parameters generator and an aircraft maintenance computer.

Claim 12 (Original): A system according to claim 11, wherein the first graphic screen displays flight parameters and the second graphic screen displays flight and maintenance parameters.

Claim 13 (Previously Presented): A process according to claim 1, wherein the jitter refers to max jitter.

Claim 14 (Previously Presented): A process according to claim 1, further comprising the step of aggregating a number of the virtual links without causing any loss of segregation.

Claim 15 (Currently Amended): A process for communication between subscriber stations via a frame switching network, said process comprising
evaluating deterministic behavior of the packet switching network, the behavior being defined as deterministic if any packet sent on the network from a source subscriber station reaches a destination subscriber station within a duration that is limited in time, said evaluating ~~comprising~~ including,

determining a latency value, the latency value being a residence time in an output buffer of a switch,

determining a max latency value, the max latency value being a maximum residence time in an output buffer of a switch,

determining a ~~BAG_i~~ BAG_i value, the ~~BAG_i~~ BAG_i value being a minimum time between two consecutive frames belonging to a virtual link i, before they are transmitted,

determining a ~~(Jitter-In)_i~~ (Jitter In)_i value, wherein the ~~(Jitter-In)_i~~ (Jitter In)_i is jitter associated with a virtual link i that represents a time interval between a theoretical instant at which a frame is transmitted, and its effective transmission that may be before or after the theoretical instant,

determining a ~~(max frame duration)_i~~ (max frame duration)_i value, the ~~(max frame duration)_i~~ (max frame duration)_i value being a duration of a longest frame on the virtual link i, and

determining for each output port from each switch on the network if the following relation is satisfied:

$$\sum_{\substack{i = \text{number of virtual links} \\ \text{passing through the buffer}}} \left[1 + \text{int} \left(\frac{(\text{Jitter In})_i + \text{max Latency}}{BAG_i} \right) \right] * (\text{max frame duration})_i \leq \text{latency}$$

; and

notifying a user, if the relation is not satisfied that said packet switching network is not deterministic.

Claim 16 (Previously Presented): A process according to claim 15, further comprising adding the virtual links one by one, and wherein the determining of each output port is performed after each addition of a virtual link.

Claim 17 (Previously Presented): A process according to claim 15, wherein the packet switching network is located on an aircraft.

Claim 18 (Previously Presented): A process according to claim 17, wherein the packet switching network includes a first switch connected to a first graphic screen and a second graphic screen.

Claim 19 (Previously Presented): A process according to claim 18, wherein the packet switching network includes a second switch connected to a flight parameters generator and an aircraft maintenance computer.

Claim 20 (Previously Presented): A process according to claim 19, wherein the first graphic screen displays flight parameters and the second graphic screen displays flight and maintenance parameters.